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NRCS  
Natural Resources  
Conservation Service

DATCP  
Dept of Agriculture, Trade  
and Consumer Protection

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Date: 4/13/95

Subject: [REDACTED] Structure Analysis

To: Leon Janowski

From: Bob Wilson *Bob*

cc: Jim Hunt  
Steve Kellermann

You asked me to review and comment about the concrete manure storage structure built by Mr [REDACTED] without a permit.

Walls:

Because of the massive footing and fairly numerous vertical rebars it appears that the wall will not tip over, nor is it likely to break off at the base.

Apparently, only four rebars were used horizontally. With the 10" thick wall and the 24" thick footing, four bars will definitely not be enough to resist vertical temperature and shrinkage cracks in both the wall and footing.

Slab:

The thickness of 4" is less than we require. Since there are no joints and since the thickness is substandard, it is likely that numerous cracks will occur in the slab.

Sheet 2, the plotting, shows a bedrock elevation of 91.7 in the structure near its north end which is the same elevation as the slab at the north end. This leads me to wonder if some of the slab is directly on bedrock.

Seepage:

I note that the slab and footing are underlain by about 6" of sand bedding. Apparently some of the sand is directly on bedrock. As discussed above, we can expect considerable cracking in the wall and floor. Unfortunately the sand is located so that it will take any seepage directly to the bedrock and probably to crevices. For this reason it appears that seepage will get into the bedrock.

The only positive aspect is the site location itself. With the structure having a steep slope below it, the water that seeps into the bedrock may well seep back out at a lower elevation where the rock outcrops (assuming it does).

Nutrient Management- You didn't mention the Nutrient Management Plan, but a site like this, sitting on bedrock and probably spreading on shallow soils, would seem to be a prime candidate for a good 590 plan.